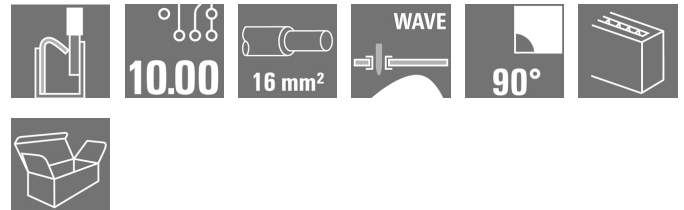


LUF 10.00/10/90 5.0SN BK BX SO**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Product image**

Similar to illustration

The sturdy, direct connection for extreme current and voltage requirements in all power electronics applications such as solar inverters, frequency converters, servo-controllers and power supplies.

General ordering data

Version	Printed circuit board terminals, 10.00 mm, Number of poles: 10, 90°, Solder pin length (l): 5 mm, PUSH IN with actuator, Clamping range, max.: 16 mm², Box
Order No.	2560670000
Type	LUF 10.00/10/90 5.0SN BK BX SO
GTIN (EAN)	4050118584134
Qty.	10 pc(s).
Product data	IEC: 1000 V / 101 A / 0.5 - 25 mm² UL: 300 V / 61 A / AWG 18 - AWG 6
Packaging	Box

Creation date March 29, 2021 7:33:06 PM CEST

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Technical data

Dimensions and weights

Depth	26.45 mm	Depth (inches)	1.041 inch
Height of lowest version	42.03 mm	Net weight	96.88 g

System parameters

Product family	OMNIMATE Power - series LU	Wire connection method	PUSH IN with actuator
Mounting onto the PCB	THT solder connection	Conductor outlet direction	90°
Pitch in mm (P)	10 mm	Pitch in inches (P)	0.394 inch
Number of poles	10	Pin series quantity	1
Fitted by customer	No	Solder pin length (l)	5 mm
Solder pin dimensions	d = 1.2 mm, Octagonal	Solder eyelet hole diameter (D)	1.6 mm
Solder eyelet hole diameter tolerance (D)+	0,1 mm	Number of solder pins per pole	4
Screwdriver blade	0.8 x 4.0	Stripping length	18 mm
Touch-safe protection acc. to DIN VDE 0470	IP20 plugged/ IP10 unplugged	Touch-safe protection acc. to DIN VDE 57 106	touch-safe with connected connectors from 6 mm ²

Material data

Insulating material	Wemid (PA)	Insulating material group	I
Comparative Tracking Index (CTI)	≥ 600	UL 94 flammability rating	V-0
Contact base material	E-Cu	Layer structure of solder connection	4...6 µm Sn matt
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-40 °C	Operating temperature, max.	120 °C

Conductors suitable for connection

Clamping range, min.	0.5 mm ²
Clamping range, max.	16 mm ²
Wire connection cross section AWG, min.	AWG 20
Wire connection cross section AWG, max.	AWG 4
Solid, min. H05(07) V-U	0.5 mm ²
Solid, max. H05(07) V-U	16 mm ²
Stranded, min. H07V-R	6 mm ²
Stranded, max. H07V-R	25 mm ²
Flexible, min. H05(07) V-K	0.5 mm ²
Flexible, max. H05(07) V-K	25 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, 0.5 mm ² min.	
w. plastic collar ferrule, DIN 46228 pt 4, 16 mm ² max.	
w. wire end ferrule, DIN 46228 pt 1, 0.5 mm ² min.	
w. wire end ferrule, DIN 46228 pt 1, 16 mm ² max.	
Plug gauge in accordance with EN 60999 a x b; ø	5.3mm (B6)

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Clampable conductor	Cross-section for conductor connection	Type	fine-wired		
		nominal	2.5 mm²		
	wire end ferrule	Stripping length	nominal	20 mm	
		Recommended wire-end ferrule	H2.5/25D BL		
		Stripping length	nominal	18 mm	
		Recommended wire-end ferrule	H2.5/18		
	Cross-section for conductor connection	Type	fine-wired		
		nominal	4 mm²		
	wire end ferrule	Stripping length	nominal	20 mm	
		Recommended wire-end ferrule	H4.0/26D GR		
		Stripping length	nominal	18 mm	
		Recommended wire-end ferrule	H4.0/18		
	Cross-section for conductor connection	Type	fine-wired		
		nominal	6 mm²		
	wire end ferrule	Stripping length	nominal	20 mm	
		Recommended wire-end ferrule	H6.0/26 SW		
		Stripping length	nominal	18 mm	
		Recommended wire-end ferrule	H6.0/18		
	Cross-section for conductor connection	Type	fine-wired		
		nominal	10 mm²		
	wire end ferrule	Stripping length	nominal	21 mm	
		Recommended wire-end ferrule	H10.0/28 EB		
		Stripping length	nominal	18 mm	
		Recommended wire-end ferrule	H10.0/18		
	Cross-section for conductor connection	Type	fine-wired		
		nominal	16 mm²		
wire end ferrule	Stripping length	nominal	21 mm		
	Recommended wire-end ferrule	H16.0/28 GN			
	Stripping length	nominal	18 mm		
	Recommended wire-end ferrule	H16.0/18			
Cross-section for conductor connection	Type	fine-wired			
	nominal	1.5 mm²			
wire end ferrule	Stripping length	nominal	20 mm		
	Recommended wire-end ferrule	H1.5/24 R			
	Stripping length	nominal	18 mm		
	Recommended wire-end ferrule	H1.5/18			
Reference text	Length of ferrules is to be chosen depending on the product and the rated voltage., The outside diameter of the plastic collar should not be larger than the pitch (P)				

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Technical data

Rated data acc. to IEC

tested acc. to standard	IEC 60947-7-4	Rated current, min. number of poles (Tu=20°C)	101 A
Rated current, max. number of poles (Tu=20°C)	101 A	Rated current, min. number of poles (Tu=40°C)	101 A
Rated current, max. number of poles (Tu=40°C)	95 A	Rated voltage for surge voltage class / pollution degree II/2	1,000 V
Rated voltage for surge voltage class / pollution degree III/2	690 V	Rated voltage for surge voltage class / pollution degree III/3	630 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	6 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	6 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	6 kV		

Rated data acc. to CSA

Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	600 V
Rated current (Use group B / CSA)	61 A	Rated current (Use group C / CSA)	61 A
Rated current (Use group D / CSA)	5 A	Wire cross-section, AWG, min.	AWG 18
Wire cross-section, AWG, max.	AWG 6		

Rated data acc. to UL 1059

Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group C / UL 1059)	150 V
Rated voltage (Use group D / UL 1059)	600 V	Rated current (Use group B / UL 1059)	61 A
Rated current (Use group C / UL 1059)	61 A	Rated current (Use group D / UL 1059)	5 A
Wire cross-section, AWG, min.	AWG 18	Wire cross-section, AWG, max.	AWG 6

Packing

Packaging	Box	VPE length	320 mm
VPE width	140 mm	VPE height	50 mm

Classifications

ETIM 6.0	EC002643	ETIM 7.0	EC002643
ECLASS 9.0	27-44-04-01	ECLASS 9.1	27-44-04-01
ECLASS 10.0	27-44-04-01	ECLASS 11.0	27-46-01-01

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Technical data

Important note

IPC conformity	Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.
Notes	• Additional colours on request • Rated current related to rated cross-section & min. No. of poles. • Wire end ferrule without plastic collar to DIN 46228/1 • Wire end ferrule with plastic collar to DIN 46228/4 • P on drawing = pitch • Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards. • The test point can only be used as potential-pickup point. • Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

Downloads

User Documentation	QR-Code product handling video
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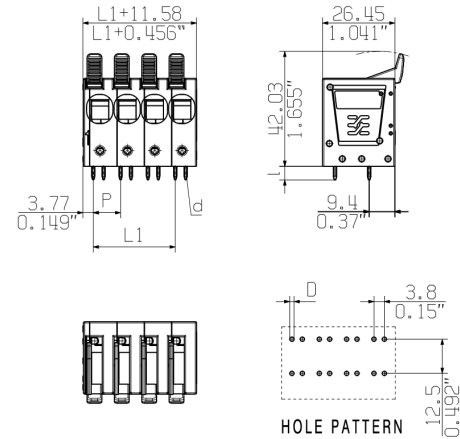
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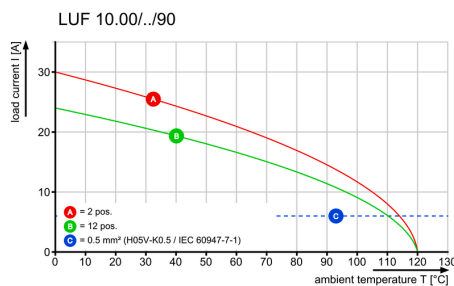
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Drawings

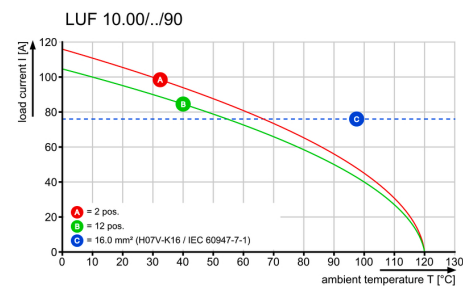
Dimensional drawing



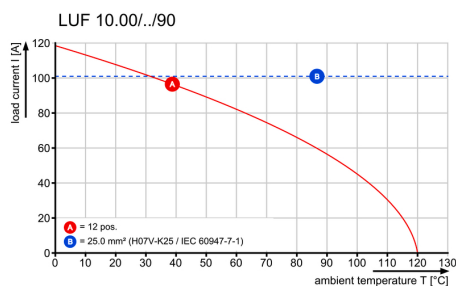
Derating curve



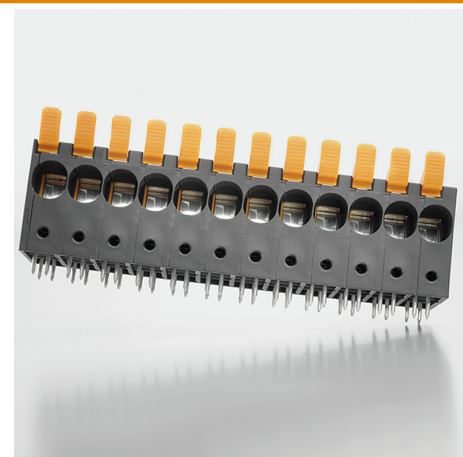
Derating curve



Derating curve



Product benefits



High stability through pin design

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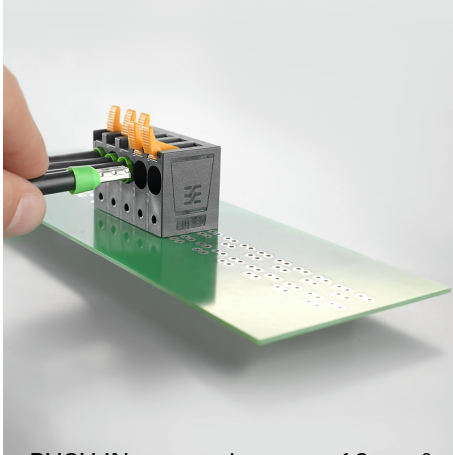
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Drawings

Product benefits



PUSH IN connection up to 16 mm²

Recommended wave soldering profiles

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Single Wave:



Double Wave:



Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.

We reserve the right to make technical changes.